

# **Noxious and Invasive Weeds in Kansas**

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# Noxious vs. Invasive

**Weed** – A plant growing where it is not wanted.

**Invasive** – A plant that has the ability to thrive and spread aggressively outside its natural range.

**Noxious** – A legal declaration made by the Legislature for those species determined to be detrimental to the environment or dangerous to humans or livestock.

# Noxious Weeds

- KANSAS STATUTES ANNOTATED
  - Chapter 2 – AGRICULTURE
    - Article 13 – WEEDS
      - 2-1314

“The term noxious weeds shall mean **kudzu** (*Pueraria lobata*), **field bindweed** (*Convolvulus arvensis*), **Russian knapweed** (*Centaurea repens*), **hoary cress** (*Cardaria draba*), **Canada thistle** (*Cirsium arvense*), **quackgrass** (*Agropyron repens*), **leafy spurge** (*Euphorbia esula*), **bur ragweed** (*Ambrosia grayii*), **pignut** (*Hoffmannseggia densiflora*), **musk (nodding) thistle** (*Carduus nutans* L.), **Johnsongrass** (*Sorghum halepense*) and **sericea lespedeza** (*Lespedeza cuneata*).”

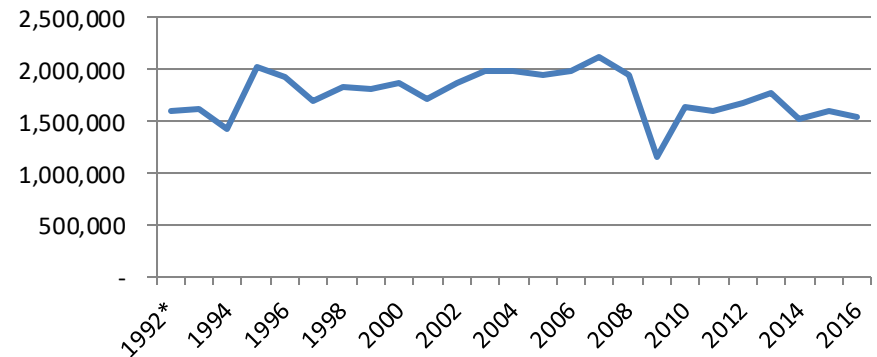
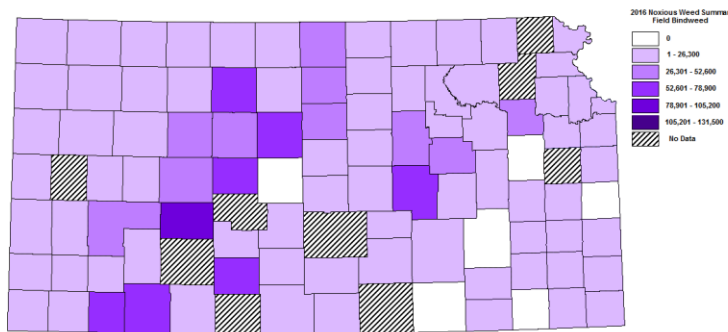
# Noxious Weeds

- KANSAS STATUTES ANNOTATED
  - Chapter 2 – AGRICULTURE
    - Article 13 – WEEDS
      - 2-1314b

“(a) The board of county commissioners of any county may declare the **multiflora rose** (*Rosa multiflora*) or the **bull thistle** (*Cirsium vulgare*), or both, to be a noxious weed within the boundaries of such county. In such event, all of the provisions ... of the Kansas Statutes Annotated [concerning] the control and eradication of noxious weeds shall apply ... within any such county.”

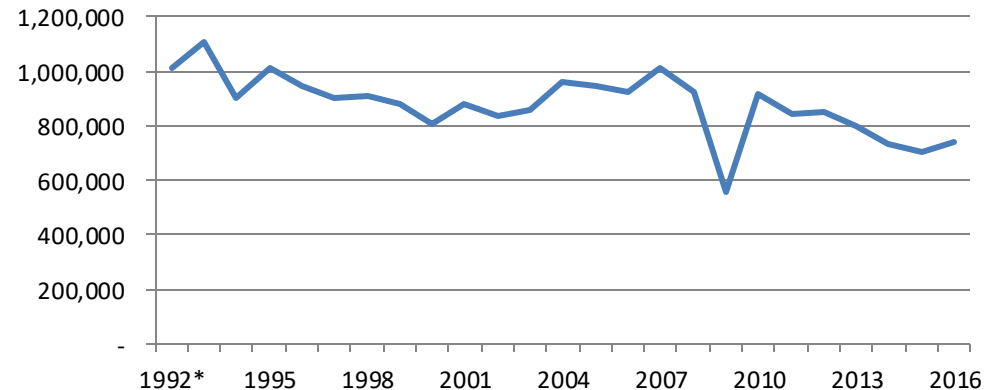
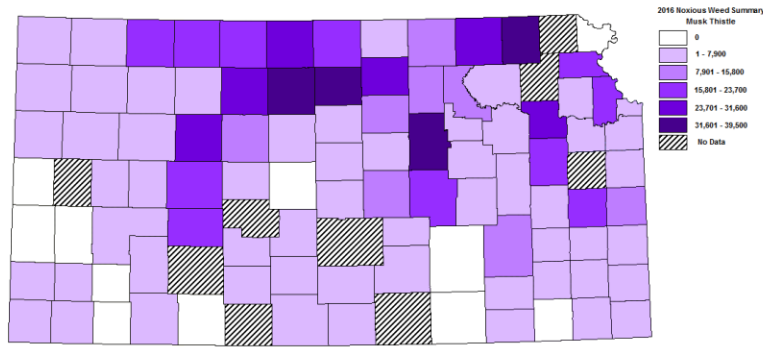
# Field Bindweed

- 1.5 million acres
- Perennial that originated from Eurasia
- Reproduces with seeds and roots
- 2 small bracts located 1” below flower



# Musk Thistle

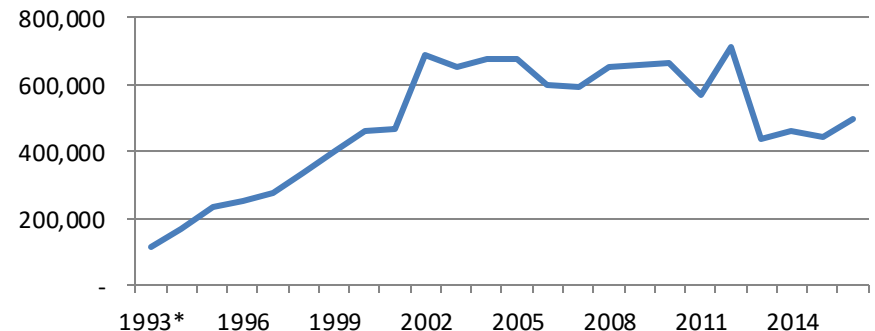
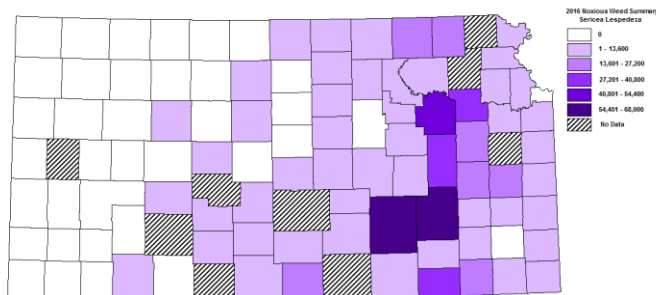
- 740,000 acres
- Usually Biannual;  
from Eurasia
- Spends 90% of life  
as rosette
- Bolts in early spring





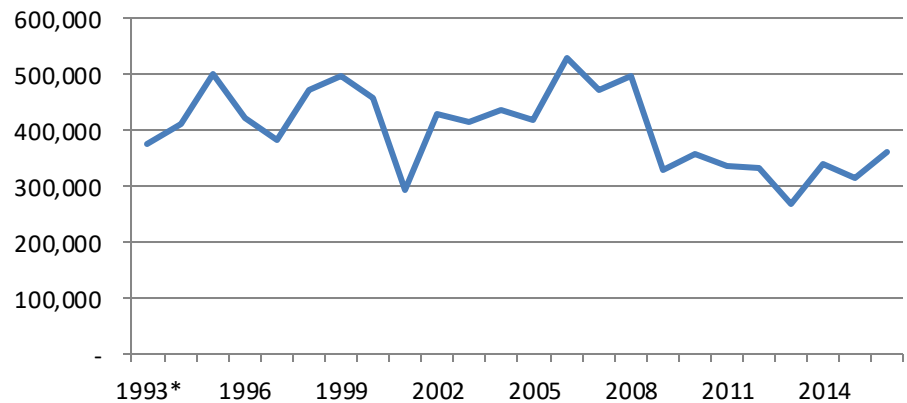
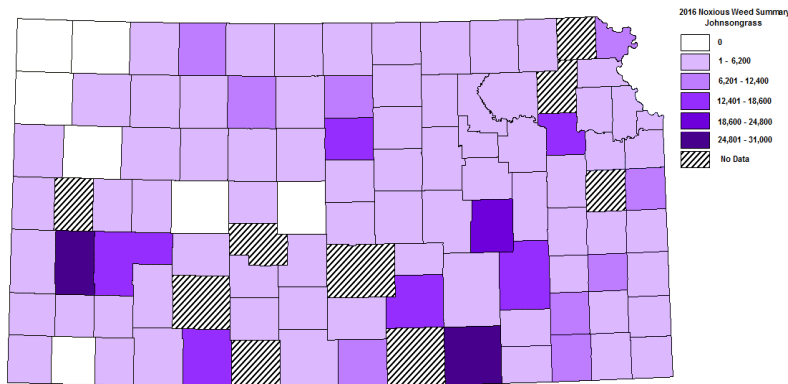
# Sericea Lespedeza

- 500,000 acres
- Newest statewide noxious weed
- Perennial legume from eastern Asia
- Trifoliate - 3 narrow wedge-shaped leaves
- Planted on mined areas in SE KS and in early CRP



# Johnsongrass

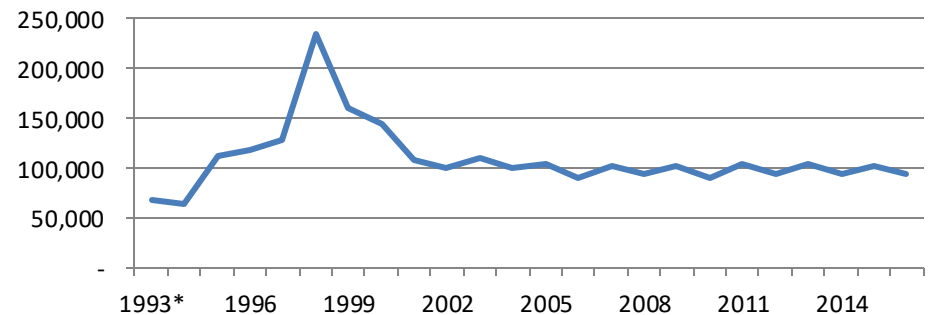
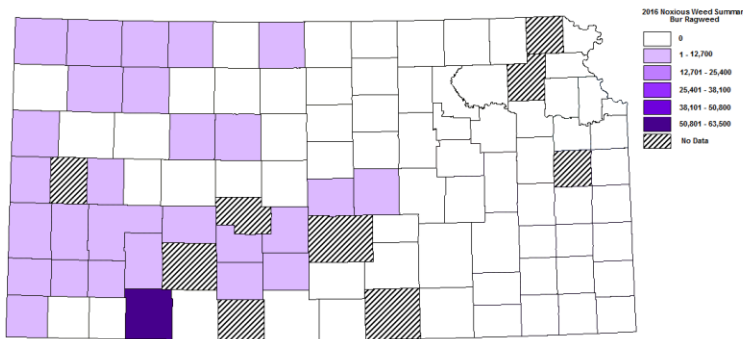
- 360,000 acres
- Perennial grass from Mediterranean
- Reproduces from seeds and rhizomes





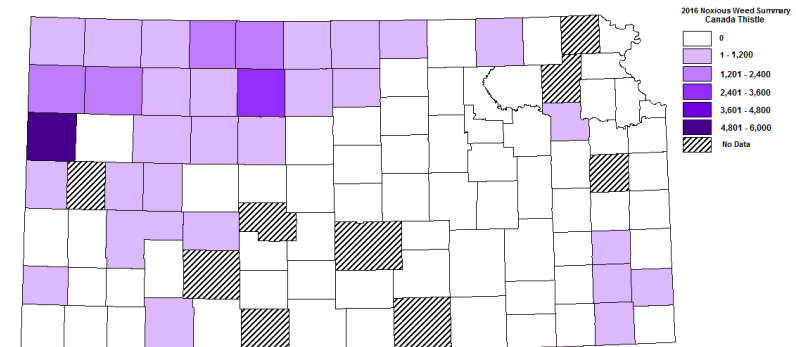
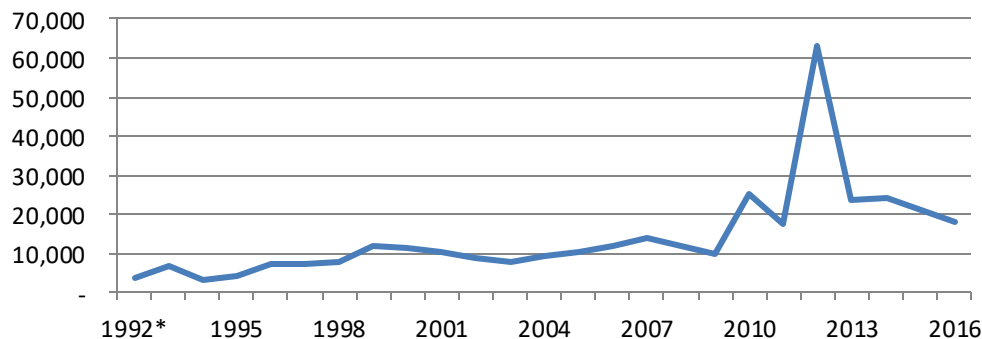
# Bur Ragweed

- 93,500 acres
- Native perennial
- Reproduces by seeds and roots
- Silver leaves and burs that contain 2 seeds



# Canada Thistle

- 18,000 acres
- Perennial from Eurasia and North Africa
- Reproduces from rhizomes and seeds
- Dioecious plant (male and female plants)



# Noxious Weeds

• Leafy spurge	Perennial Rhizomes and seeds Toxic to Cattle
• Hoary cress	Perennial Rhizomes and seeds
• Pignut	Perennial native to U.S. Meade and Clark Co.
• Kudzu	Legume from Asia Crawford & Cherokee Counties and Ft. Riley
• Quackgrass	Perennial
• Russian knapweed	Perennial Infests disturbed areas

Leafy Spurge



600 acres

Quackgrass



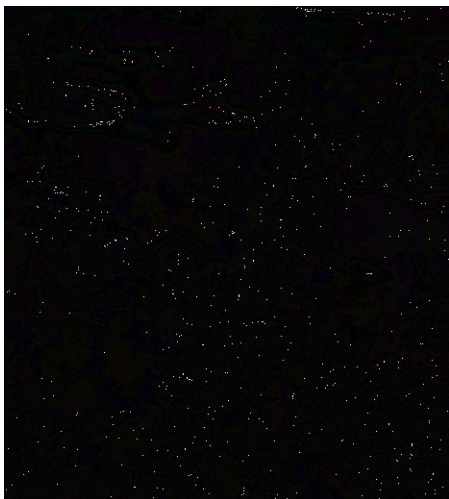
0 acres

Hoary Cress



350 acres

Pignut



210 acres

Kudzu



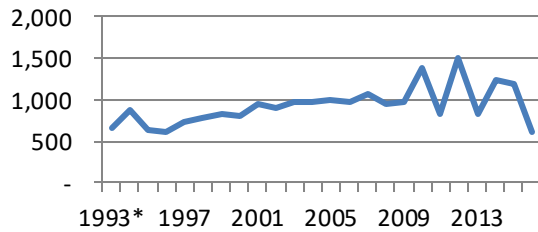
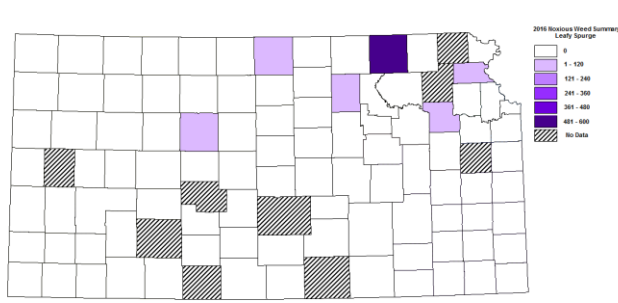
4 acres

Russian knapweed

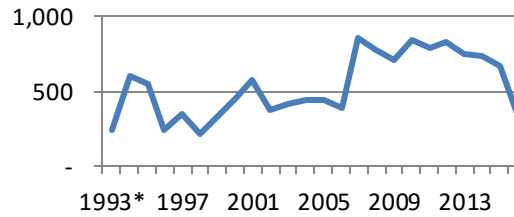
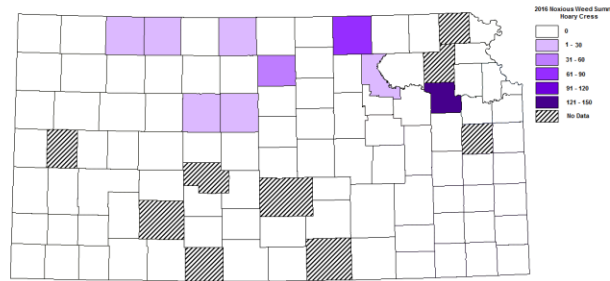


0 acres

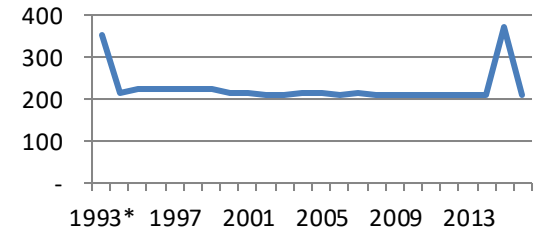
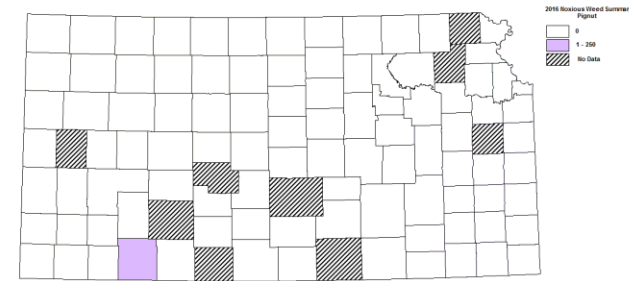




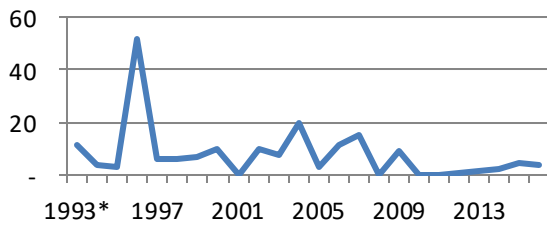
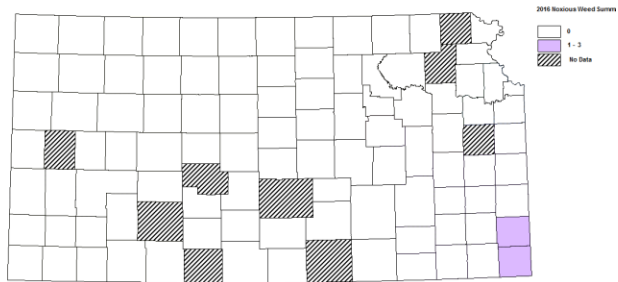
# Leafy Spurge



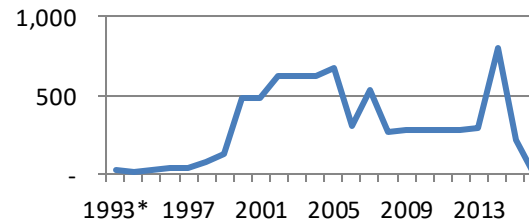
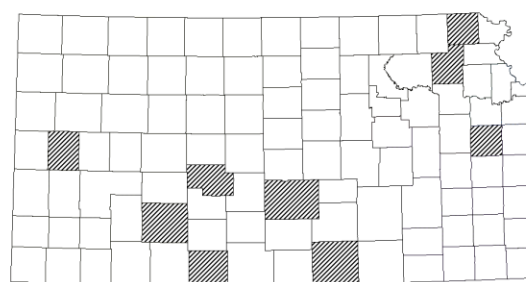
# Hoary Cress



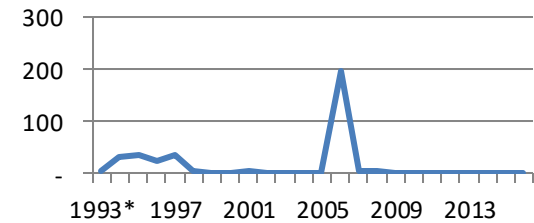
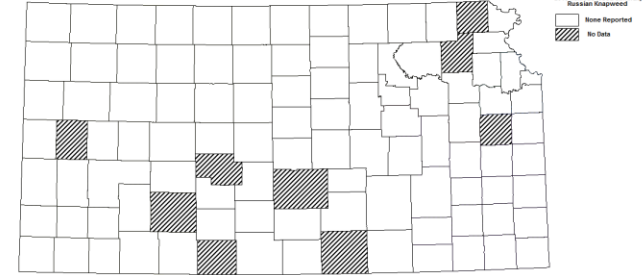
# Pignut



# Kudzu



# Quackgrass

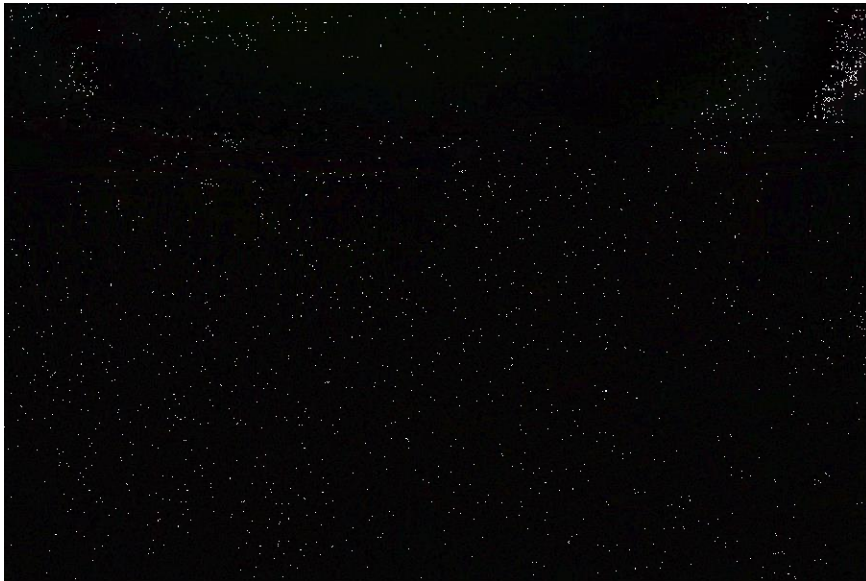


# Russian knapweed

# Noxious Weeds

- County-option Weeds

Multiflora rose – 9 Counties



Bull thistle – 10 Counties





# Quarantined Weeds

- **Purple Loosestrife**  
(*Lythrum salicaria*)
  - Perennial sold as an ornamental up to Jan. 2002
  - Lake, riparian and wetland plant



# Quarantined Weeds

- **Grecian Foxglove**

(*Digitalis lanata*)

- Escaped ornamental native to Eastern Europe
- Perennial and only spreads by seeds
- Toxic to humans and animals





# Quarantined Weeds

- **Tamarisk (Salt Cedar)**

(*Tamarix* spp.)

- KS newest quarantine
- Perennial shrub from Eurasia
- Introduced as ornamental and stream bank stabilization



# Quarantined Weeds

## All Federal Noxious Weeds

- 19 Aquatic species
  - Hydrilla
- 5 Parasitic species
  - Dodder
- 84 Terrestrial species
  - Cogon grass
  - Giant hogweed
  - Tropical soda apple



### Federal Noxious Weed List

Effective as of December 10, 2010

#### Aquatic

Latin Name	Author(s)	Common Name(s)
<i>Azolla pinnata</i>	R. Brown	Mosquito fern, water velvet
<i>Caulerpa taxifolia</i> (Mediterranean strain)	(Vahl) C. Agardh	Killer algae
<i>Eichhornia azurea</i>	(Swartz) Kunth	Anchored water hyacinth, rooted water hyacinth
<i>Hydrilla verticillata</i>	(L.) Royle	Hydrilla
<i>Hygrophila polysperma</i>	T. Anderson	Miramar weed
<i>Ipomoea aquatica</i>	Forsskal	Water spinach, swamp morning glory
<i>Lagarosiphon major</i>	(Ridley) Moss	African elodea
<i>Limnophila sessiliflora</i>	(Vahl) Blume	Ambulia
<i>Melaleuca quinquenervia</i>	(Cavanilles) S.T. Blake	Broadleaf paper bark tree
<i>Monochoria hastata</i>	(Linnaeus) Solms-Laubach	Arrowleaf false pickerelweed
<i>Monochoria vaginalis</i>	(N.L. Burm.) K. Presl	Heartshape false pickerelweed
<i>Ottelia alismoides</i>	(L.) Pers.	Duck lettuce
<i>Sagittaria sagittifolia</i>	Linnaeus	Arrowhead
<i>Salvinia auriculata</i>	Aublet	Giant salvinia
<i>Salvinia biloba</i>	Raddi	Giant salvinia
<i>Salvinia herzogii</i>	de la Sota	Giant salvinia
<i>Salvinia molesta</i>	D.S. Mitchell	Giant salvinia
<i>Solanum tampicense</i>	Dunal	Wetland nightshade
<i>Sparganium erectum</i>	Linnaeus	Exotic bur-reed

#### Parasitic

Latin Name	Author(s)	Common Name(s)
<i>Aeginetia</i> spp.	Linnaeus	Varies by species
<i>Alectra</i> spp.	Thunb.	Varies by species
<i>Cuscuta</i> spp. (except for natives)	Linnaeus	Dodders
<i>Orobancha</i> spp. (except for natives)	Linnaeus	Broomrapes
<i>Striga</i> spp.	Lour.	Witchweeds

# Invasive Species of Concern

- No regulatory status
- Encourage reporting and control of known infestations
- Early Detection, Rapid Response (EDRR)

## **Diffuse knapweed**

## **Spotted Knapweed**

These closely related and difficult to control species have infested lands coast to coast. It has become established in spotty populations in the northeast and north central parts of the state.



## **Giant knotweed    Japanese knotweed    Bohemian knotweed**

This group of related species can grow up to 16 feet in height and form large, dense thickets that shade out desirable species. It is becoming established in the eastern portion of the state.





## **Yellow Toadflax**

## **Dalmatian Toadflax**

These closely related species are escaped ornamental flowering plants that are found in spotty populations in eastern Kansas but are spreading rapidly.



## **Cutleaf teasel**

## **Common teasel**

A common part of floral bouquets, both of these species are widespread along state highway rights-of-way in the eastern third of the state.



## **Medusahead Rye**

An extremely invasive winter annual grass that can out-compete even other invasive grasses. It forms a dense, persistent litter on the soil surface that decomposes slowly and is highly flammable.



## **Italian plumeless thistle**

A highly invasive thistle related to the musk thistle, Kansas' second most abundant noxious weed. The state's first population was found, and eradicated, in 2013 in Montgomery County.

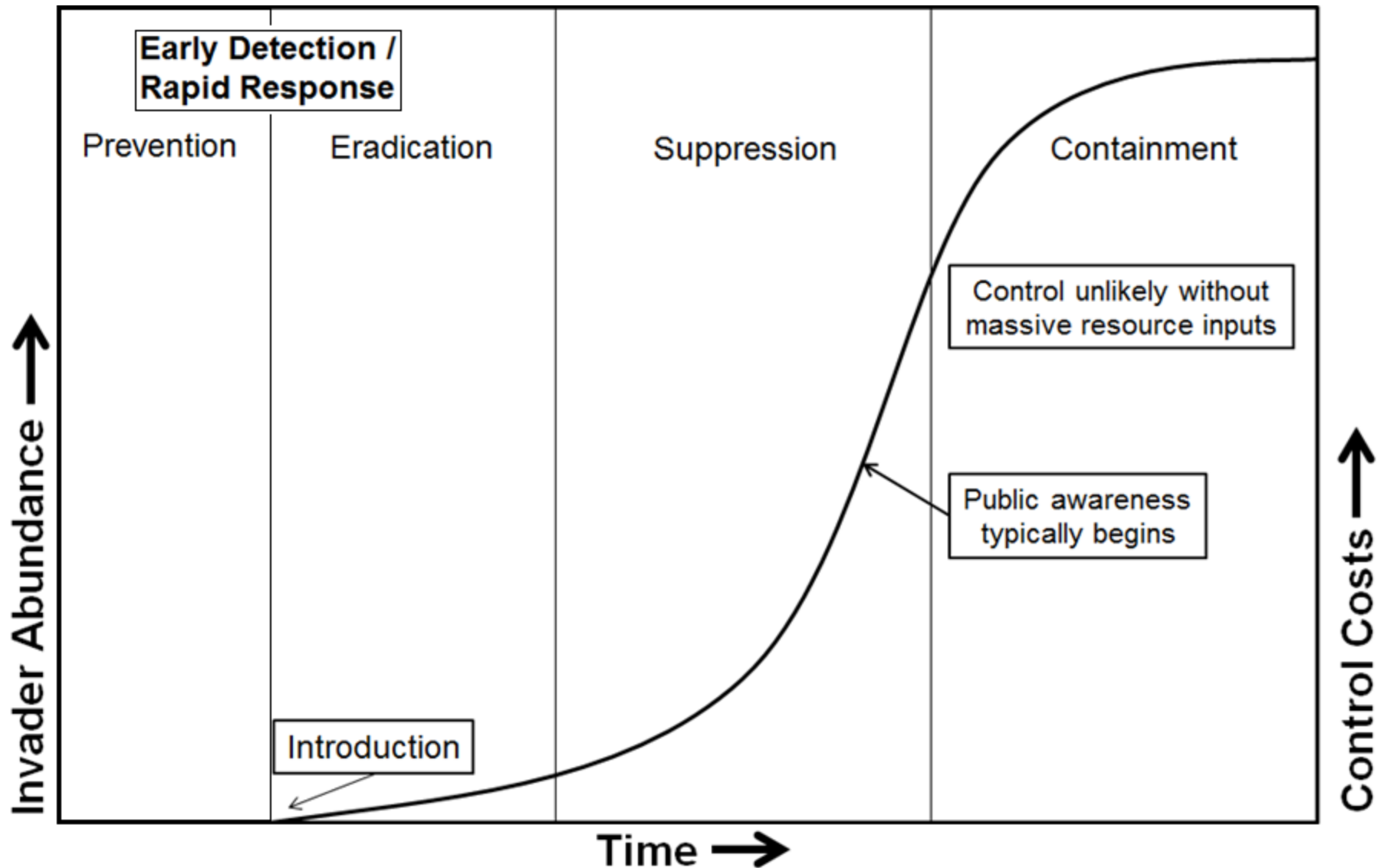


# Invasive Species of Concern

Tropical soda apple  
Japanese barberry  
Common buckthorn  
Reed canarygrass  
Oxeye daisy  
Siberian elm  
Grecian foxglove  
Cogongrass  
Tree-of-heaven  
Poison hemlock  
Hemp  
Giant hogweed  
Japanese honeysuckle  
Amur honeysuckle

Tartarian honeysuckle  
Bell's honeysuckle  
Hydrilla  
Yellow flag iris  
Black locust  
Purple loosestrife  
Garlic mustard  
Silverleaf nightshade  
Autumn-olive  
Yellow starthistle  
Pale swallowwort  
Black swallowwort  
Scotch thistle  
Eurasian water-milfoil

# Invasive Species Invasion Curve



# Criteria for Potential Listing of Weeds

- ☒ Small population size
- ☒ Aggressive growth characteristics
- ☒ Difficult to control
- ☒ Non-native species
- ☒ Toxic to Livestock or Humans

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